

## PATENT COOPERATION TREATY

PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference <b>CF017500WO</b>	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. <b>PCT/JP 03/10782</b>	International filing date (day/month/year) <b>26.08.2003</b>	Priority date (day/month/year) <b>28.08.2002</b>
International Patent Classification (IPC) or national classification and IPC Int.Cl. <sup>7</sup> <b>C09K11/06, H05B33/14</b>		
Applicant <b>CANON KABUSHIKI KAISHA</b>		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.  <input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  These annexes consist of a total of _____ sheets.
3. This report contains indications relating to the following items:  I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand <b>26.03.2004</b>	Date of completion of this report <b>19.11.2004</b>	
Name and mailing address of the IPEA/JP <b>Japan Patent Office</b> 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Authorized officer <b>YOKO WATANABE</b>	<b>4V 9279</b>
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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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**I Basis of the report****1. With regard to the elements of the international application:\***

- ☒ the international application as originally filed
- ☐ the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the claims:  
Nos. \_\_\_\_\_, as originally filed  
Nos. \_\_\_\_\_, as amended (together with any statement) under Article 19  
Nos. \_\_\_\_\_, filed with the demand  
Nos. \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
sheets/figs \_\_\_\_\_, as originally filed  
sheets/figs \_\_\_\_\_, filed with the demand  
sheets/figs \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:**

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

**4. ☐ The amendments have resulted in the cancellation of:**

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_

**5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\***

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	<u>1, 2, 6, 7</u>	YES
	Claims	<u>3, 4, 5, 8, 9, 10</u>	NO
Inventive step (IS)	Claims		YES
	Claims	<u>1-10</u>	NO
Industrial applicability (IA)	Claims	<u>1-10</u>	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

## (Document)

D1:JP 7-90259 A D2:JP 8-259934 A D3:US 5989737 A D4:JP 2001-192651 A  
 D5:JP 2002-50481 A D6:JP 2002-237386 A D7:JP 2001-118683 A(especially [0044])  
 D8:US 507742 A D9:JP 2002-212150 A D10:WO 00/22027 A1

The subject matter of claim 1,6 does not appear to involve an inventive step in view of the document 1-8 cited in the ISR. D1-3 disclose an EL element layer(light-emitting layer) contains amine compound represented by the formula[1]and luminescent materials. Although D1-3 does not disclose luminescent materials represented by the formula[2],the luminescent materials were well-known as luminescent materials in the technical field to which the invention pertains(see D4-8). Therefore, employing the luminescent materials disclosed in D4-8 as luminescent materials combined with amine compounds disclosed in D1-2 would have been easily conceived by the person skilled in the art.

The subject matter of claim 2,7 does not appear to involve an inventive step in view of the document 1-4,8 cited in the ISR. D1-3 discloses an EL element layer (light-emitting layer) contains amine compound represented by the formula[1]and luminescent materials. Although D1-3 does not disclose luminescent materials represented by the formula[3],the luminescent materials were known as luminescent materials in the technical field to which the invention pertains(see D4,8). Therefore, employing the luminescent materials disclosed in D4,8 as luminescent materials combined with amine compounds disclosed in D1-3 would have been easily conceived by the person skilled in the art.

The subject matter of claim 3,4,8,9does not appear to be novel with respect to D3. D3 discloses an EL element layer(light-emitting layer) contains amine compound represented by the formula[1]and luminescent materials represented by the formula[4][5](see claims and [0023]).

In addition,the subject matter of claim 3,4,8,9 does not appear to involve an inventive step in view of the document 1-3,8 cited in the ISR. D8 discloses luminescent materials represented by the formula[4]. Therefore, employing the luminescent materials disclosed in D8 as luminescent materials combined with amine compounds disclosed in D1-3 would have been easily conceived by the person skilled in the art.

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**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: **V**

The subject matter of claim 5,10 does not appear to be novel with respect to D9. D9 discloses an EL element layer (light-emitting layer) contains amine compound represented by the formula[1] and luminescent materials represented by the formula[6] (see claims and [0034][0039]).

In addition, the subject matter of claim 5,10 does not appear to involve an inventive step in view of the document 1-3,9,10 cited in the ISR. D10 discloses luminescent materials represented by the formula[6]. Therefore, employing the luminescent materials disclosed in D10 as luminescent materials combined with amine compounds disclosed in D1-3,9 would have been easily conceived by the person skilled in the art.